IN THE SPECIFICATION:

Please replace the paragraph beginning at page 2, line 14 of the specification with the following amended paragraph.

The scrambled digital signal is MLT3 encoded and it is then coupled for example to a category 5 wire twisted pair through transformers. Since the transformers are high pass filters in nature, the energy below their cutoff frequency of about 50 kHz is lost. If in the signal many periods with few transitions are present, the signal loses ~~significantly~~ significant energy at low frequencies due to the presence of the transformer. In this way, the received waveform can suffer clipping within the receiver and induce errors in the received data even in the case where the lengths of the lines are short. For this reason, the baseline wander effect must be ~~correct~~ corrected in the receiver.

Please replace the paragraph beginning at page 3, line 21 of the specification with the following amended paragraph.

The present invention makes it possible to form a digital data transmission system with a device for correcting [[of]] the baseline wander which makes such correction in an analog way and in a more exact and stronger way for the presence of the analog feedback.

Please replace the paragraph beginning at page 3, line 21 of the specification with the following amended paragraph.

In Figure 1, a 100Mb/s digital data transmission ethernet system is schematically shown. The system comprises [[an]] a unit 100 for transmitting digital data transformed into a MLT3 voltage signal V(TX), that is a voltage signal that consists of three levels : +1, 0, -1 wherein each digital one is mapped into a transition and each digital zero is mapped into a no transition. Such signal V(TX) is sent from the unit 100 by means of a first transformer 1 through a cable 2 with a length of 100m which is constituted of a category 5 twisted wire pair.

Please replace the paragraph beginning at page 3, line 21 of the specification with the following amended paragraph.

The signal inLP so-achieved is supplied to the low pass filter 10 having a cutoff frequency of about 50 kHz. The voltage signal output from the filter 10 controls a current generator I(V) which produces the current signal Iblw directly proportional to the voltage output from the filter 10. In this way, the direct component lost in the two transformers 1 and 3 is recovered. The block between the nodes where it is possible to detect the signals inR and outE has a transfer function equal to that of a high pass filter having a zero in the origin and the first pole at about 500 kHz. The output signal outE is also similar to the transmitted signal and it is sent to a transmitted digital data recovery block 20. It is possible to use [[a]] an uncoupling buffer 300 between the output of the equalizer and the switches.